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AN ARCHEOLOGICAL INVESTIGATION AND ASSESSMENT OF THE THREE HORS--ETC(U)

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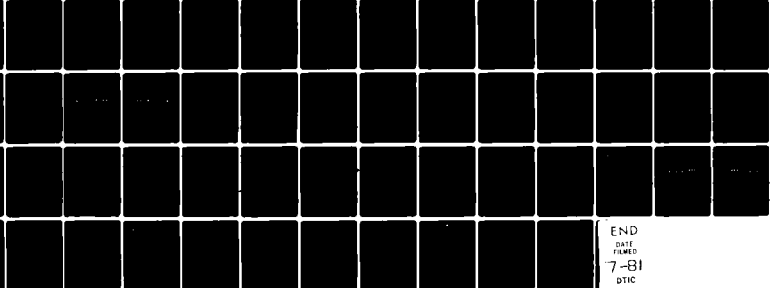
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AN ARCHEOLOGICAL INVESTIGATION AND
ASSESSMENT OF THE THREE HORSE SITE
(39DW35), MOREAU RIVER AREA,
WEST SHORE LAKE OaHE,
DEWEY COUNTY, SOUTH DAKOTA .

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CARL R. / FALK
ROBERT E. / PEPPERL

TECHNICAL REPORT, NO. 80-06

Department of Anthropology
Division of Archeological Research
University of Nebraska
Lincoln.

JULY 1980

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ABSTRACT

✓
An archeological reconnaissance investigation of the Three Horse site (39DW35), located on the west shore of Lake Oahe, Dewey County, South Dakota, was completed in July 1979 under an agreement between the U.S. Army Corps of Engineers (Omaha District) and the University of Nebraska. The site was initially identified by Corps personnel as a result of the construction of a domestic water intake facility adjacent to the lakeshore. Both human and lithic remains were noted uncovered by the construction activity. The primary objectives of this study were to determine the nature and extent of remaining cultural deposits and to determine the eligibility of these resources for nomination to the National Register of Historic Places. Subsequent field investigation resulted in the location and documentation of disturbed materials, definition of probable prehistoric lithic and historic debris surface remains, and identification of three historic depressions. Field and laboratory evaluations suggest that the site does not meet criteria for nomination to the National Register of Historic Places. No further action is recommended. ↗

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INTRODUCTION

In response to an after-the-fact application by the Cheyenne River Housing Authority and the Moreau-Grand Electrical Co-op for Section 10 and 404 permits to construct a domestic water intake facility, the U.S. Army Corps of Engineers initiated a cultural resources survey of the general project area in June 1978. A Corps of Engineers staff archeologist determined that cultural remains, including human bone, had been disturbed by earthmoving operations; further field evaluation was recommended (Boyd 1979). In May 1979, the University of Nebraska, Division of Archeological Research was awarded a contract to investigate the impacted site (39DW35) and to assess specific requirements for mitigative action. On-site investigations were initiated 28 July 1979 by a seven-member field crew under the supervision of Carl R. Falk.

PROJECT DESCRIPTION

The water intake facility, as constructed, consists of a pumping station at the lake edge and easements for a buried waterline and buried power cable installed along a right-of-way extending approximately 360 meters (m.) across Federal land (S $\frac{1}{2}$, SE $\frac{1}{4}$, SW $\frac{1}{4}$, SE $\frac{1}{4}$ and S $\frac{1}{2}$, SW $\frac{1}{4}$, SE $\frac{1}{4}$, SE $\frac{1}{4}$ of section 12, T. 16N., R. 30E., Dewey County, South Dakota).

A manmade peninsula has been constructed on the lakeshore to house the intake structure and water pump. Fill material was obtained by leveling the lower bench area and excavating a portion of the upper bench slope. Earthmoving operations have produced a 3-4 m. cutbank across the slope face directly above the intake peninsula.

A pedestrian survey of the construction area and the requested easement strip was performed by a Corps of Engineers archeologist during June 1978 (Boyd 1979). On the basis of both lithic and human bone remains, archeological site 39DW35 was identified in the borrow area cutbank. The borrow area and bench surface directly above the cutbank (encompassing approximately 3 acres), was the focus of attention during the July 1979 field investigation.

STUDY DEFINITION

The current study was conducted in accordance with Federal policy concerning the identification and protection of cultural resources situated on Federal land. Pertinent authorities include

The Historic Preservation Act of 1966 (P.L. 89-665); The Archeological and Historical Preservation Act of 1974 (P.L. 93-291); and Executive Order 11593, "Protection and Enhancement of the Cultural Environment."

This study provides the necessary background research and field investigation appropriate for a cultural resources survey as described in the Scope of Work (appendix E) and as defined in the Corps of Engineers' final rules entitled "Identification and Administration of Cultural Resources" (33 CFR Part 305.4(f)).

The purpose of the present work is to determine the nature and extent of cultural resources present within the site area and to determine the eligibility of these resources for nomination to the National Register of Historic Places. Recommendations concerning the necessity or extent of further work are presented as a result of the study.

STUDY METHODS

The methods employed in this study are appropriate to the data recovery requirements of a cultural resources study program. The study is designed in accordance with the tasks outlined in the Scope of Work (appendix E), and as suggested in the proposed Federal guidelines entitled, "Recovery of Scientific, Prehistoric, Historic, and Archeological Data; Methods, Standards, and Reporting Requirements" (36 CFR Part 66).

The objectives of the study were accomplished through the following work program.

(1) Records search. Manuscripts, survey forms, excavation records, and other unpublished materials in the Smithsonian Institution River Basin Survey site records, on file at the Midwest Archeological Center, Lincoln, Nebraska were thoroughly examined to identify known resources and to determine the extent of previous research in the study area.

(2) Literature review. Additional background information was obtained through research of pertinent published and unpublished materials available at library facilities of the University of Nebraska-Lincoln and at the Midwest Archeological Center in Lincoln.

(3) National Register check. The most recent annual full listing of the National Register of Historic Places, and additional notices published in the Federal Register, were consulted to determine the presence of National Register properties in the immediate study area.

(4) Field survey. An intensive pedestrian surface inspection was implemented to provide complete coverage of all land within a limited area surrounding the reported site location. In conjunction with this survey, a detailed map was produced to document the extent and distribution of all identified surface materials and features.

(5) Field tests. Limited subsurface investigations were employed to determine the presence and depth of subsurface cultural deposits and to verify the natural stratigraphy at the site. Controlled subsurface data were obtained by excavating uniform levels within measured test units, by clearing existing exposures, and through the use of a 1-inch-diameter soil probe.

(6) Consultation. Specialists in the fields of geology and physical anthropology were consulted concerning specific details of the project. The resulting information is detailed in appendixes A and D to this report.

Details concerning particular methods and procedures utilized in the field investigation are provided in appropriate following sections.

BACKGROUND

DESCRIPTION OF THE STUDY AREA

The immediate project is situated on a small rounded bench spur located on the right bank (west shore) of Lake Oahe. The upper bench surface (MT-3) is at elevation 1660 feet mean sea level (m.s.l.), approximately 45 feet (ft.) (14 m.) above the current lake shoreline (figures 1A and 1B). The northern and eastern edge of the area is bounded by a steep bluff at the lake edge. Along the southern margins the bench slopes abruptly to a small embayment and ravine. The U.S. Government boundary line is located approximately 225 m. west of the site. The adjacent land west of this boundary includes a small residential community and is under the jurisdiction of the Cheyenne River Indian Reservation.

Prior to the development of Lake Oahe, this area formed the rim of the steep-sided south wall of the Moreau River valley. To the north, the bench surface dropped directly to a meander of the Moreau River channel approximately 100 ft. (30 m.) below. The southeast corner of the bench spur, presently the site of the water intake structure, formed a narrow ridge which sloped down the valley wall along a sharp escarpment to the broad river terrace more than a quarter of a mile west of the former river channel. The original river valley was less than a mile wide in this area but widened to the east as it joined the valley of No Mouth Creek near its confluence with the Missouri River, 4 miles southeast of the project area.

The Moreau River flows east to southeast and drains the northern region of the vast Missouri Plateau which in turn occupies the western two-thirds of the State of South Dakota and is part of the Great Plains physiographic province (cf. Fenneman 1931; Flint 1955:5, 15). In the vicinity of the project, the drainage flows through a dissected shale plain characterized by a thin mantle of soil, varying in depth from 17 to 33 inches (in.) (43-84 cm.) and overlying the Pierre Shale bedrock (Kalvels and Boden 1979:8).

This region of Pierre Hills (Rothrock 1943:47; Flint 1955: 15-16) extends west of the Missouri River trench, between the plateau regions to the north and south, to the Black Hills in the west. With the exception of a narrow boulder-strewn zone adjacent to the west bank of the Missouri River, there is little evidence in this region of the earlier glaciations which are so apparent east of the Missouri River (Flint 1955:16).

A



B



Figure 1. A. General view to NW of site 39DW35 showing location of domestic water intake system in relation to upper MT-3 surface. B. View to SE of jetty construction and water intake system. Human remains and lithic debris were recovered by Corps of Engineers personnel just below small tree on right.

A more detailed discussion of the physical environment of the Missouri trench area and the implications for human settlement and utilization of the region has been provided by Lehmer (1971:49-55).

PREVIOUS ARCHEOLOGICAL INVESTIGATIONS

Research of pertinent literature and records indicates that no previous archeological investigations were conducted within the immediate vicinity of site 39DW35 prior to the initial survey carried out by the U.S. Army Corps of Engineers in 1978 (Boyd 1979). Considerable archeological investigations have been implemented within the Missouri River valley but little attention has been directed to investigation of the Moreau River drainage itself.

Beginning in 1946, extensive archeological investigations, concentrating primarily on site identification and select salvage operations, were implemented by the Smithsonian Institution River Basin Surveys (Wedel 1947). A large number of sites were identified through this field effort which continued until major portions of the Missouri trench were inundated by reservoir construction during the early 1960's. Work completed during this period provides the majority of available data concerning prehistoric human use of the Middle Missouri subarea. A comprehensive summary and synthesis of the results of the Smithsonian Institution River Basin Survey program has been provided by Lehmer (1971). More recent field efforts in the vicinity of the project area, implemented subsequent to the Smithsonian Institution investigations, have not been recorded.

Smithsonian survey investigations along the western margin of the Missouri River valley in Dewey County were conducted primarily during 1949 and 1952. Further site-specific investigations were initiated subsequent to completion of the reservoir (e.g., Neuman 1963; Mallory 1965; Kotch and Starr 1968).

These investigations were primarily restricted to the Missouri trench itself and did not extend into the Moreau River valley. Four sites adjacent to the mouth of the Moreau River (sites 39DW1, 216, 217, and 254) and a nearly continuous distribution of sites along the Missouri River channel extending north and south of the Moreau-Missouri River confluence were identified by Smithsonian field crews. Only two sites are known within the upper reaches of the Moreau River (sites 39DW11 and 241); neither of these sites has been investigated in the field.

General locations for sites identified near the present project area are illustrated in figure 2. A brief description of each site, the date and extent of previous investigations, references

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from these Plains Village sites. A number of subdivisions and regional variants of two major cultural traditions have been described as a result of these efforts. The Middle Missouri tradition (ca. A.D. 900 to A.D. 1675) represents the initial influx and development of village dwelling horticultural groups into the area. The Coalescent tradition (ca. A.D. 1400 to A.D. 1780) is considered to reflect the influence of the more southern central Plains groups, and in the later variants, evidences contact with various Euro-American cultures (see for example Lehmer 1971).

The majority of sites previously identified near the current project area represent settlements of the Plains Village period. Two of the sites described in appendix B contain components assigned to the Middle Missouri tradition (Extended variant) and 25 sites represent the Coalescent tradition (Extended and Post-Contact variants). The Arikara utilized much of this area during the late prehistoric and the historic periods. Three of the known sites in the study area have been tentatively described in the survey records as Arikara villages.

NATIONAL REGISTER PROPERTIES

There are no archeological or historical sites within the vicinity of site 39DW35 which are currently listed in the National Register of Historic Places. The most recent annual full listing (Federal Register 44(26), Tuesday, February 5, 1979, Part II) and additional notices through 25 September 1979 (Federal Register 44(187)) were consulted.

FIELD INVESTIGATION: 1979

Archeological site 39DW35 was initially identified in June 1978 and reported as a singular find spot location represented by human bone and several lithic artifacts exposed in the face of a borrow area cutbank (Boyd 1979). On the basis of this preliminary survey, it was suggested that an undisturbed portion of the site might be expected and that mitigative effort would be appropriate. The current field investigation was authorized to assess these possibilities and to determine the extent of further work required.

The objectives of the field investigation were 1) to determine the nature and characteristics of the surface and subsurface remains at the site, and 2) to recover field data relevant to evaluating the significance of the remaining site area with respect to National Register criteria (36 CFR 60.6). These objectives are pertinent to a determination of eligibility for nomination to the National Register of Historic Places.

METHODS AND PROCEDURES

Field operations included an intensive examination of the described find spot location as well as an extensive inspection of the surrounding area. Recognizing that the described location could represent a secondary deposit or that other (possibly unrelated) materials might be present, a major portion of the effort was concentrated on undisturbed areas in the immediate vicinity of the initial find spot.

Systematic methods were employed to identify and document surface materials and features. An intensive (100% coverage) pedestrian survey was conducted within the limits of the general topographic feature on which the site is located. All observed surface materials and features were marked with surveyor's flags and subsequently mapped with a transit. Elevation points and other features (*i.e.*, roads and existing water system structures) were included to produce a detailed site map. All specimens collected were plotted in the field and were identified by a reference number (catalog number) on the final site map.

Existing exposures were cleared for inspection and controlled test units were excavated to determine the characteristics of natural and cultural subsurface deposits. Test units were excavated in uniform arbitrary levels and the matrix of each level was separately dry screened. Soil variations noted in the exposed profiles were described and photographed. Soil probe tests were

placed across the general surface area and within identified surface features and were employed to supplement profile data.

IMPLEMENTATION

On 28 July 1979, an on-site investigation was initiated by a seven member field crew under the supervision of Carl R. Falk and Robert Pepperl. The investigation was completed on 30 July 1979.

The specific find spot described in the initial survey report (Boyd 1979) was identified. Subsequently, an area including the immediate site vicinity, extending approximately 200 m. west and northwest and encompassing nearly 3 acres of the upper bench surface, was selected for investigation. The general surface and all exposures within these limits were systematically inspected. The extent and distribution of surface materials were identified and mapped. This information was utilized in determining locations for subsurface tests.

Two 1m^2 test units were initially placed on the upper bench surface; one unit was located at a point of highest elevation where no surface materials had been observed. The second unit was located on the upper bench slope within an area of concentrated chipped stone debris. These units were excavated in 10 cm. levels. In addition, the upper face of the full borrow area cutbank was shaved to provide a clear profile for inspection.

A variety of surface conditions were encountered on the highly varied topography of the project area. The lower bench surface had been leveled in construction of the peninsula which houses the water intake structure. The upper bench surface and slopes were, however, undisturbed; these areas are currently utilized as pasture. A moderate to heavy cover of bunch grass and other short to mid-range grasses obscure much of this upper surface. Visibility improved along the bench rim which supports a less dense vegetative cover. Ant hills and other surface clearings provided occasional areas of good visibility across the survey area.

RESULTS

The original find spot, located in the borrow area, was verified during the 1979 investigation. In addition, a surface scatter of chipped stone debris, three historic depressions, and a scatter of historic debris were identified on the upper bench (MT-3) surface directly above the borrow area. Figure 3 provides locational data for all observed remains.

Borrow Area

Materials initially identified by Corps personnel were found along the north margin of the borrow area (Boyd 1979:2). Observed remains included seven pieces of chipped stone debris, a single core, one bilaterally edged block, and a thin well-flaked elongate bifacial form. Minute traces of a red ochre-like substance were noted adhering to all specimens. Six of these items were manufactured from Knife River Flint while the remaining four are chalcedony. Human remains were also collected; these include left and right tibiae (diaphyses only) and a single left femur (diaphysis only). The human remains were not made available for study and are not further considered.

Using both narrative and photographic documentation, the initial find spot was easily relocated. The Pierre Shale walls of the borrow excavation are currently eroding and much of the bank face was covered by slumped debris. A single partial human cranium was recovered from the immediate area of the original find, however. The specimen was nearly completely exposed on the surface near the midpoint of the sloping slump face. The cranial cavity was completely filled with shale debris. A full description and assessment of this specimen is included in appendix D.

The areas immediately adjacent to the human find spots, as well as the remaining bank surfaces, were closely inspected for evidence of small bone fragments or other cultural debris. No additional specimens or features were noted. The Pierre Shale in this exposure is overlain by a thin mantle of calcareous soil and gravels with larger cobbles included in the lower slope area. The face of the full exposure was shaved to produce a fresh profile. No evidence of additional cultural materials was noted in these profiles.

Upper Terrace

While further attempts to locate other evidence of cultural remains within the borrow area were unsuccessful, systematic inspection of the slopes and bench surface above the cutbank resulted in identification of a small scatter of surface debris. In addition to 27 individual surface material locations, 3 rectangular depressions were mapped (figure 3).

Extensive hand probe tests along the edges and floor of each depression failed to produce evidence of cultural debris or structural remains. Two brick and 7 window glass fragments were noted scattered near these depressions and provided the only tentative suggestion of structural remains (see appendix C).

The surface scatter, comprised of chipped stone detritus, small bone fragments, historic ceramic remains, and glass and metal

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debris, was distributed over a total area of approximately 10,000 m² (ca. 2.5 acres). Most of these materials were concentrated along the eastern margin of the bench spur, however. With the exception of two locations, all chipped stone items and bone fragments were restricted to an area of 12x20 m. along the east end of the bench. All but three historic items were recorded in close proximity to the observed depressions and were included within an area of 32x65 m. on the more westerly portion of the bench surface.

Subsurface Test Units

A permanent datum was positioned near the center of the surface distribution and an east-west baseline was established through this point and across the long axis of the upper surface. Test locations were selected at uniform intervals along this axis. In the event further subsurface investigations were warranted, additional units would have been placed on grid points generated from this baseline.

² Subsurface testing was initiated through the excavation of two 1m² units located at 10 m. intervals east and west of the permanent datum. This placement resulted in a test (unit 1) situated within the recorded surface concentration of chipped stone debris and a second test (unit 2) located in an area near the observed depressions where no surface debris was recorded. These tests were oriented toward determining the presence of buried cultural remains and toward evaluating the need for further subsurface investigation.

A sod level, approximately 2 cm. thick, was shaved from the surface of each test and treated as a separate unit. The remaining matrix was removed in 10 cm. levels. All levels were dry screened separately through quarter-inch wire mesh.

Chipped stone debris was recovered from the sod level and upper two levels of test unit 1, while the remaining levels were sterile of cultural material. Cultural remains were noted in one of nine levels of test unit 2; historic glass fragments and a fragment of charred wood were recovered from level 2 (2-10 cm. s.d.).

Both tests were excavated through the upper soil zones and into a calcareous, gravelly soil lying directly above the Pierre Shale bedrock. A zone of heavy clay soil, present in the upper levels of test unit 2, was absent in test unit 1 which was located lower on the bench slope. The floors of both units were probed to an additional 1 meter in depth with negative results.

Based on the results of these tests, as well as the negative results obtained with the hand probe, further subsurface test excavation was not considered warranted.

Detailed excavation records for each test and a full inventory of recovered materials are included in appendix C. Table 1 provides a summary tabulation of materials recovered during the 1979 investigation.

DISCUSSION

Cultural remains identified as direct results of the initial and present investigations are from disturbed or essentially surface contexts. All field efforts strongly suggest that significant intact subsurface deposits are lacking.

Human Remains

Human and lithic specimens observed in the borrow area by both field parties were thoroughly disturbed and clearly out of primary context. It is probable that human remains observed by the Corps personnel (three partial limb elements) and the single partial cranium recovered during the present investigation represent a single individual. Further, the association of lithic materials collected by the Corps and the human remains seems probable. Evidence of the original deposits which contained these remains is lacking, having been totally destroyed by construction of the domestic water intake structure. Evidence of additional cultural remains in the immediate area is also lacking.

Assessment of the cultural and temporal place of these remains is difficult. Three lines of evidence are relevant, however. Geologic evaluation (appendix A) of the field setting suggests that observed materials may represent an intrusion into soft, possibly weathered bedrock or, alternately, the result of downslope movement. In either case no clear temporal association is evident.

Evaluation of the partial cranium is somewhat more suggestive. McWilliams (appendix D) concludes that the specimen represents a male who was in his thirties and probably a member of an Archaic American Indian population. This evaluation is based on a tentatively reconstructed cranial index and certain aspects of specimen morphology. Evidence does suggest that the individual represented is not representative of Plains Village populations known for the period post-dating ca. A.D. 900.

Evaluation of the associated lithic materials collected by the Corps is also of interest. The large (length 69 mm.) elongate bifacial form is similar to specimens recovered from pre-ceramic contexts at the Walth Bay and Travis 2 sites located to the north along the east shore of Lake Oahe (see Ahler et al. 1974; Ahler et al. 1977). Based on these admittedly tenuous arguments, it is suggested that the human and associated lithic specimens uncovered in

Table 1. Summary of collected material frequencies for various contexts; Site 39DW35, Dewey County, South Dakota: 1979 investigation.

Description	Surface (Plotted)	Test 1	Test 2	Borrow Cutbank	Beach Surface	Totals
Chipped stone debris: Unpatinated	12	20				32
Fire-cracked rock		14	6			20
Unmodified bone	3					3
Human cranium				1		1
Historic ceramic	5				1	6
Brick	2					2
Glass	7		2			9
Metal	3					3
Charcoal			1			1
					Total	77

the borrow area represent probable use of the immediate area by an undefined Late Paleo-Indian or Plains Archaic period population.

Upper Terrace Remains

At least two separate uses of the upper terrace surface have been documented. The initial use is represented by a thin scatter of chipped stone debris. These remains are limited to the eroding surface and upper 10 cm. of the western margin of the upper terrace. None of the materials recovered are considered diagnostic given present taxonomic and temporal period criteria. The observed materials do suggest, however, use of the upper bench surface by undefined Native American groups. The relationship between these materials and the remains exposed in the borrow area is unknown, though it is suggested that the borrow remains pre-date the lithic debris scatter. The probability that these latter surface materials represent activities associated with the numerous Plains Village period sites in the general area (see appendix B) cannot be discounted.

A second and more recent use of the upper surface is documented by the three observed depressions and scatter of ceramic, metal, and glass debris. Extensive probing failed to reveal evidence of structural debris or features within the depressions. Recovered historic debris suggests a late nineteenth or early twentieth century use of the area. A single Ironstone footring (specimen 39DW25-29; see appendix C) bears a maker's mark suggesting a manufacture date of between 1886-1891 (Godden 1964, 1975) and is consistent with this evaluation. It is suggested that these remains document late reservation period occupation and/or use of this high promontory. The Corps of Engineers administered site area is adjacent to the present Cheyenne River Indian Reservation and is actively used as pasture at the present time.

ASSESSMENT AND RECOMMENDATIONS

Based on a full field evaluation of the Three Horse site (39DW35), it appears that construction of the domestic water intake structure resulted in a direct and adverse impact to resources present. Construction and associated activities resulted in the partial destruction of the site area and the displacement of both human and lithic remains. Construction activities do not appear, however, to have affected cultural debris and feature remains located on the high terrace adjacent to and above the water intake facility.

NATIONAL REGISTER ELIGIBILITY

On the basis of both field and laboratory observations, the Three Horse site (39DW35) does not meet criteria for nomination to the National Register of Historic Places. Construction and related activities have seriously disturbed human and lithic remains associated with the lower portion of the defined site area and have destroyed any real investigative potentials.

While construction activities have not affected materials associated with the upper terrace, these remains do not warrant National Register consideration at this time. Native American use of the upper terrace is represented by a sparse scatter of lithic debris confined to the surface and upper 10 cm. of the western margin of the terrace spur. These remains are not extensive, cannot be clearly associated with an identifiable cultural historical unit and--considered independently--do not meet criteria of significance.

Similarly, while this investigation has documented use of the upper terrace surface during the historic period, the defined materials do not meet National Register criteria. National Register evaluation of the upper terrace remains can only be completed in conjunction with a full survey and inventory of cultural resources within this general west bank area - such an inventory has yet to be completed.

RECOMMENDATIONS

No further cultural resource investigations will be required within the immediate site area. At present, neither professional nor agency needs are anticipated which would justify further field investigations. No further action is recommended with respect to

the site. Completion of a full survey and resource evaluation of Federally-administered lands within the general project area is recommended, however.

The events leading up to the present study strongly underscore the need for continued attention to Section 10 and 404 permit procedures. After-the-fact studies of this type can only partially mitigate resource losses.

SUMMARY AND CONCLUSIONS

Archeological investigation of the Three Horse site was carried out in July 1979 under an agreement between the University of Nebraska-Lincoln and the U.S. Army Corps of Engineers, Omaha District. The site was initially identified as a result of the construction of a domestic water intake structure; both human and lithic artifactual remains were uncovered by the construction. The primary objectives of the study were to determine the nature and extent of cultural deposits present within the site area and to determine the eligibility of these resources for nomination to the National Register of Historic Places. The results of this work are summarized below.

1. Intensive field investigation of the immediate site area resulted in the location and documentation of materials disturbed by construction of a domestic water intake structure, definition of lithic and historic debris scatters, and identification of three historic depressions.
2. Evaluation of geological, physical anthropological, and archeological data suggests that human and associated lithic materials recovered out of context in the borrow area represent probable use of the area by undefined Late Paleo-Indian or Plains Archaic period populations.
3. Evaluation of upper terrace remains demonstrates use of the area by unidentified Native American groups, as well as a later use of the area associated with the historic reservation period.
4. All field and laboratory evaluations suggest that site 39DW35 does not meet criteria for nomination to the National Register of Historic Places. No further field evaluation of the immediate site area is recommended.
5. Losses resulting from construction of the domestic water intake facility are considered to be partially mitigated as a result of this study.
6. Finally, full survey and cultural resource inventory of Federally-administered lands within the general site area is recommended.

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APPENDIX A

GEOLOGICAL REPORT FOR SITE 39DW35,
DEWEY COUNTY, SOUTH DAKOTA

GEOLOGICAL REPORT FOR SITE 39DW35, DEWEY COUNTY, SOUTH DAKOTA

by

Alan H. Coogan
Department of Geology
Kent State University
Kent, Ohio

INTRODUCTION

Site 39DW35 is located on the excavated slopes of the MT-3 terrace in Dewey County, South Dakota (T. 14N, R. 10E, U.S.G.S. 7.5 minute series, Moreau Quadrangle). The original discovery of cultural materials (human bone) was made by Corps of Engineers personnel during a site investigation for the development of a jetty on a small bay immediately south of the site near the line between Sections 12 and 13 along a dirt road to Lake Oahe. The materials came from a borrow area along the present road.

The site was subsequently tested by personnel from the Division of Archeological Research, University of Nebraska. A geological investigation of the site was made in conjunction with this work during July 1979.

GEOMORPHIC AND STRATIGRAPHIC SETTING

The University of Nebraska excavations were conducted on the nearly flat surface of MT-3 at an elevation of about 1600-1670 feet. The tests were dug into a thin silt cap of Holocene age on the MT-3 surface. The terrace itself consists of cut surface into the bedrock Pierre Shale which is overlain by thin glacial till characterized by the presence of conspicuous erratic glacial boulders. The Holocene silt cap overlying the glacial deposits varies in thickness from zero to over 40 feet. It measured 1.5 feet in the observed test units.

There was no discernible soil stabilization horizon and no discernible stratigraphic subdivisions in the silt cap below the modern soil layer. This lack of natural stratigraphic subdivision in the Holocene silt cap is common where the silt is thin (as here) and may represent a low depositional rate or a combination of

deposition and erosional events which produced a thin deposit. Lack of soil stabilization horizons suggests the latter.

The borrow pit itself was excavated into the bedrock Pierre Shale on the moderate hillside slope from the MT-3 surface to the embayment of Lake Oahe. Before disturbance, the borrow area probably had a cover of intermixed silt and slope wash overlying Pierre Shale.

GEOLOGIC INTERPRETATION

The materials found in the borrow pit were on and imbedded in Pierre Shale. Clearly, the cultural remains are not of Cretaceous age; and consequently their location must either represent an intrusive placement into the soft, possibly weathered bedrock or a movement downslope to the site of their eventual discovery, or both.

One can only speculate on the nature of the original pre-excavation situation. Before establishment of Lake Oahe in the 1960's, the site was in the "breaks" of the Moreau River drainage. It lay several hundred feet above river level on the slopes of an unnamed creek. The human bone may have come from a shallow grave dug in the thin, easily excavated creek wall, the grave in the form of a shallow trench or bench on the hillside. Simply scraping out a bench or small terrace (possibly into the Pierre Shale) and then covering the remains with overlying upslope materials would provide an expedient gravesite in the given situation.

The site is now so altered (by construction) as to preclude further well-founded reconstruction. There is no reason, however, to believe that the "burial" site is related to sites located at higher elevations on the main surface of MT-3.

APPENDIX B

TABULAR SUMMARY OF PREVIOUS
ARCHEOLOGICAL INVESTIGATIONS

EXCLUDED

APPENDIX C

FIELD RECORDS AND SPECIMEN INVENTORY DATA

Pages
43-48

DELETED

UNIVERSITY OF NEBRASKA-LINCOLN
DIVISION OF ARCHEOLOGICAL RESEARCH

EXCAVATION FORM

Site No. 39DW35 Unit No. 1

1. Unit Identification: Test 1; Levels 1-5

2. Location: A. Horizontal: as plotted, 10 meters east of datum

B. Vertical: S.D. _____ D.D. _____

3. Description: One by one meter test square located on slope of upper bench surface near the lake bluff edge. Remaining matrix was removed in 10-cm levels to a depth of 44-55cm. The floor was probed to an additional one meter of depth.

4. A. Screened: Yes X No _____ B. Mesh size: 1/4"

5. Special Sampling and Processing: The sod level and each of the 10-cm levels were dry screened separately through 1/4" wire mesh. All materials (including gravels) were retained.

6. Associations: A. Features: None

B. Artifacts: Lithic debris recovered from upper levels. See inventory listing.

C. Other: None

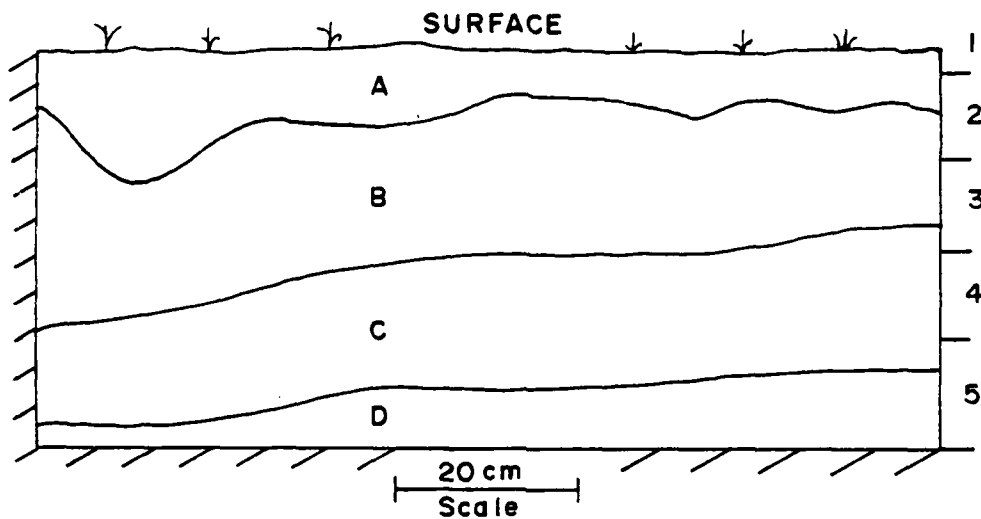
7. Remarks: _____

8. Photograph Nos.: 1:7-13, 18-20 (B/W); 5:28-33 (Color)

9. A. Recorded by: R. Pepperl/C. Falk Date: 7/28/79

Site No. 39DW35

Unit No. 1



Soil Description

- A. light brown sandy, loamy soil; light gravel, roots.
- B. light brown soil; sandier than level A; light gravel
- C. light brown sandy and slightly calcareous soil; light gravel.
- D. light brown soil, caliche nodules; heavy gravel, large rocks.

Cultural Remains

- Level 1 (0-2 cm S.D., sod): 15 chipped stone flakes and flaking debris; 11 small granite fragments (fire-cracked?).
- Level 2 (2-10 cm S.D.): 3 chipped stone flakes and 3 small granite fragments.
- Level 3 (10-20 cm S.D.): 2 chipped stone flakes.
- NO materials recovered from levels 4 and 5.

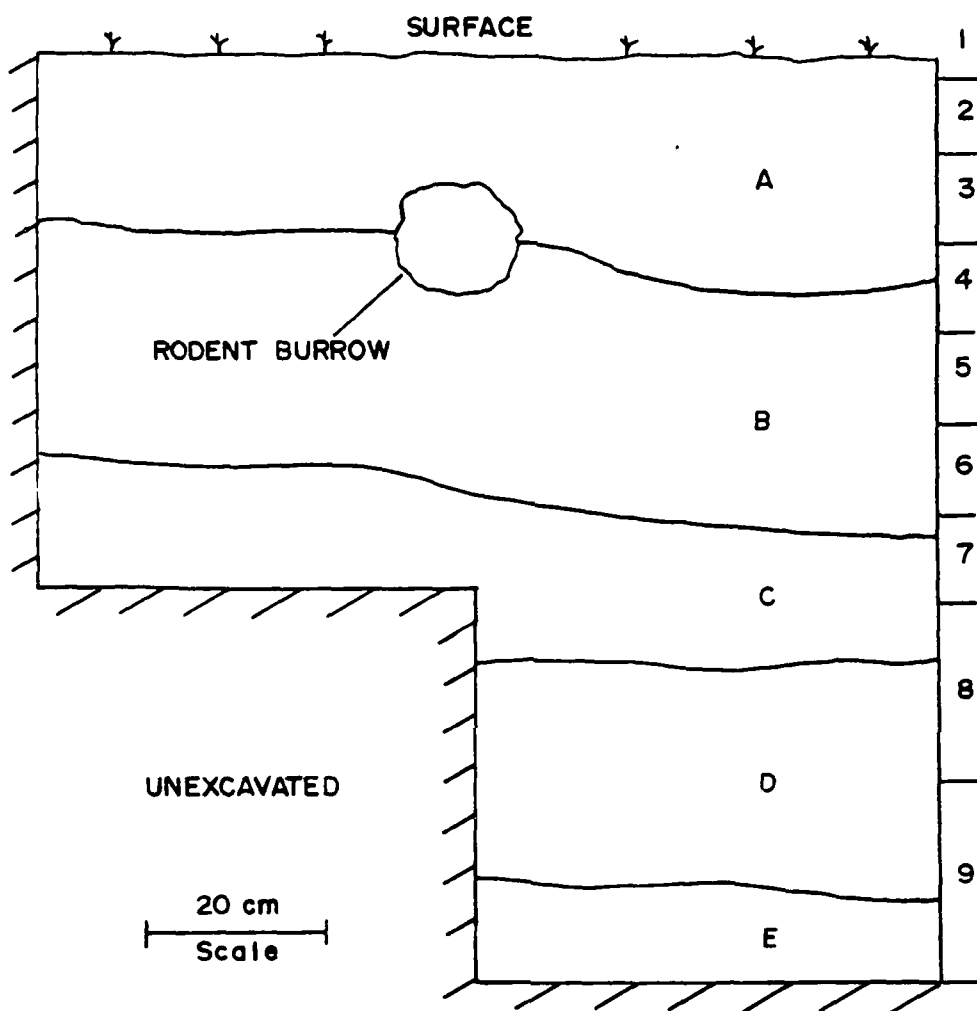
Scale _____

UNIVERSITY OF NEBRASKA-LINCOLN
DIVISION OF ARCHEOLOGICAL RESEARCH

EXCAVATION FORM

- Site No. 39DW35 Unit No. 2
1. Unit Identification: Test 2; Levels 1-9
2. Location: A. Horizontal: as plotted, 10 meters west of datum
B. Vertical: S.D. 0-105cm D.D.
3. Description: One by one meter test square located on nearly level area of highest elevation of upper MT-3 surface (ca. 4 meters east of mapped depression). A 2cm thick sod level was shaved and screened separately; remaining matrix was removed in 10-cm levels through 60-cm; partial 20-cm levels were excavated to 100-cm. Floor was probed.
4. A. Screened: Yes X No B. Mesh size: 1/4"
5. Special Sampling and Processing: Each level was dry screened separately through 1/4" mesh.
6. Associations: A. Features: None
- B. Artifacts: 2 window glass fragments and a small fragment of charred wood were recovered from level 2 (2-10cm S.D.)
- C. Other: None
7. Remarks:
8. Photograph Nos.:
9. A. Recorded by: R. Pepperl/C. Falk Date: 7/28/79

Site No. 39DW35 Unit No. 2



Soil Description

- A. dark brown humus; roots.
- B. hard, compact, brown shale-like soil.
- C. light tan, sandy soil with some leaching.
- D. light tan, soft and sandy soil; increased leaching.
- E. gravel level, caliche nodules.

Cultural Remains

Level 2 (2-10 cm S.D.): charred wood fragment, 2 window glass fragments, 6 small granite fragments.

NO materials recovered from levels 3 through 9.

Scale _____

UNIVERSITY OF NEBRASKA-LINCOLN
DIVISION OF ARCHEOLOGICAL RESEARCH

PHOTOGRAPH RECORD

Site 39DW35 Date 28 July 1979
 Photographer C. Falk Lot No. 1
 Camera 35mm Film Type Plus-X

View	Exp. No.	Description
SE	2	downslope view of historic depressions
SE	3	downslope view of historic depressions
SE	4	downslope view of historic depressions
SE	5	downslope view of historic depressions
SE	6	downslope view of historic depressions
N	7	test 1; north wall
N	8	test 1; north wall
N	9	test 1; north wall
S	10	test 1; south wall
S	11	test 1; south wall
S	12	test 1; south wall
S	13	test 1; south wall
W	14	general site area; upper bench
W	15	general site area; upper bench
SE	16	downslope-domestic water intake system
SE	17	downslope-domestic water intake system
N	18	test 1; north wall
N	19	test 1; north wall
N	20	test 1; north wall
NE	21	borrow area-location of human remains
NE	22	borrow area-location of human remains
NE	23	borrow area-location of human remains
NE	24	borrow area-location of human remains
SW	25	view of site from Lake Oahe
SW	26	view of site from Lake Oahe
SW	27	view of site from Lake Oahe
SW	28	view of site from Lake Oahe
SW	29	view of site from Lake Oahe
SW	30	view of site from Lake Oahe
SW	31	view of site from Lake Oahe

UNIVERSITY OF NEBRASKA-LINCOLN
DIVISION OF ARCHEOLOGICAL RESEARCH

PHOTOGRAPHIC RECORD

Site 39DW35 Date 28 July 1979
Photographer C. Falk Lot No. 5
Camera 35mm Film Type color slides (ektach.)

View	Exp. No.	Description
NE	23	view of (human) calvarium
NE	24	view of (human) calvarium
NE	25	view of (human) calvarium
NE	26	view of (human) calvarium
NE	27	view of borrow area
N	28	test 1; north wall
N	29	test 1; north wall
N	30	test 1; north wall
W	31	test 1; west wall
W	32	test 1; west wall
W	33	test 1; west wall
E	34	view of depression and test 2
E	35	view of depression and test 2
E	36	view of depression and test 2
E	37	general site area and water intake peninsula

UNIVERSITY OF NEBRASKA-LINCOLN
DIVISION OF ARCHEOLOGICAL RESEARCH

CATALOG FORM

Project Moreau River Site Number 39DW35 Date 7/28/79

Catalog
Number

Description

Catalogued units 1-27 represent plotted surface locations: the Map Reference is identical to the catalog designation

- 1 chipped stone: 1 grey chert flake
- 2 chipped stone: 1 grey-mottled TRSS core fragment
- 3 chipped stone: 1 clear chalcedony flake fragment; 1 yellow/brown chert shatter, fire-cracked rock: fragment of granite
- 4 bone: 1 unmodified fragment (Bovidae tooth enamel)
- 5 chipped stone: 1 yellow/grey mottled TRSS flake fragment
- 6 1 non-cultural rock fragment
- 7 chipped stone: 1 shatter fragment?
- 8 chipped stone: 1 red/grey TRSS flake fragment
- 9 chipped stone: 1 dark brown chalcedony flake
- 10 chipped stone: 1 white chert flake fragment, 1 grey/yellow mottled TRSS core fragment
- 11 chipped stone: 1 dark brown chalcedony flake: bone: 1 left basiptyrgium, *Ictalurus* sp. (recent).
- 12 1 non-cultural rock fragment (no map reference)
- 13 ceramic: 1 undecorated Ironstone footring
- 14 brick: 1 fragment
- 15 chipped stone: 1 silicified wood core fragment

UNIVERSITY OF NEBRASKA-LINCOLN
DIVISION OF ARCHEOLOGICAL RESEARCH

CATALOG FORM

Project Moreau River Site Number 39DW35 Date 7/28/79

Catalog Number	Description
16	<u>glass</u> : 1 fragment of "milk" glass, white
17	<u>ceramic</u> : 1 undecorated Ironstone footring
18	<u>brick</u> : 1 fragment
19	<u>glass</u> : 6 window glass fragments
20	<u>ceramic</u> : 1 blue-green transfer printed Ironstone handle fragment
21	<u>glass</u> : 1 window glass fragment
22	<u>metal</u> : 1 fragment of a machine-cut square nail
23	<u>ceramic</u> : 1 brown glazed stoneware body sherd
24	<u>metal</u> : 1 unknown fragment, burned
25	1 <u>non-cultural rock</u> fragment
26	<u>metal</u> : 1 wagon box strap
27	<u>bone</u> : 1 unmodified fragment (Bovidae rib shaft, heavily eroded)
	<u>Cataloged Unit 28: borrow area cutbank</u>
28	<u>bone</u> : human cranium (partial)
	<u>Cataloged Unit 29: beach surface</u>
29	<u>ceramic</u> : decorated Ironstone footring ("Peachblow and Sons Rd No. 56152")

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DIVISION OF ARCHEOLOGICAL RESEARCH

CATALOG FORM

Project Moreau River Site Number 39DW35 Date 7/28/79

Catalog Number	Description
<u>Cataloged Units 30-34: Test Unit 1</u>	
30	Test 1, Level 1 (0-2cm s.d.) <u>chipped stone:</u> 15 flake, flake fragments and pieces of shatter <u>fire-cracked rock:</u> 11 fragments of granite
31	Test 1, Level 2 (2-10cm s.d.) <u>chipped stone:</u> 3 flakes <u>fire-cracked rock:</u> 3 fragments of granite
32	Test 1 Level 3 (10-20cm s.d.) <u>chipped stone:</u> 2 flakes
33	Test 1, Level 4 (20-30cm s.d.) no material recovered
34	Test 1, Level 5 (30-44cm s.d.) no material recovered
<u>Cataloged Units 35-42: Test Unit 2</u>	
35	Test 2, Level 1 (0-2cm s.d.) no material recovered
36	Test 2, Level 2 (2-10cm s.d.) <u>fire-cracked rock:</u> 6 fragments of granite <u>glass:</u> 2 window glass fragments <u>wood:</u> 1 piece of charred wood

UNIVERSITY OF NEBRASKA-LINCOLN
DIVISION OF ARCHEOLOGICAL RESEARCH

CATALOG FORM

Project Moreau River Site Number 39DW35 Date 7/28/79

Catalog Number	Description
37	Test 2, Level 3 (10-20cm s.d.) no material recovered
38	Test 2, Level 4 (20-30cm s.d.) no material recovered
39	Test 2, Level 5 (30-40cm s.d.) no material recovered
40	Test 2, Level 6 (40-50cm s.d.) no material recovered
41	Test 2, Level 7 (50-60cm s.d.) no material collected
42	Test 2, Level 8 (60-80cm s.d.) no material recovered

APPENDIX D

DESCRIPTIVE MORPHOLOGY OF A CRANIUM

RECOVERED FROM SITE 39DW35

DESCRIPTIVE MORPHOLOGY OF A CRANIUM RECOVERED FROM SITE 39DW35

by

K. Richard McWilliams
University of Nebraska
Lincoln

The following details information relevant to a single human cranium recovered by a UNL field party in July 1979 at site 39DW35. Post-cranial materials (apparently associated with the present specimen) which were collected by Corps of Engineers personnel the previous year were not available for study.

The partial cranium from site 39DW35 exhibits both breakage and weathering. Bones present include the frontal, right parietal, partial left parietal, and an incomplete occipital. These bones are sufficient to provide information concerning the shape of the skull. Measurements are:

- maximum cranial length - 181 mm.
- maximum breadth - 139 mm (estimated)
- cranial index - 77 (estimated)

The cranial index is characteristic of the relatively narrow Meso-cranic skulls of Archaic and earlier peoples (Newman 1962). A further suggestion of early American Indian cranial morphology is seen in the small occipital bun present. Damage to the frontal bone prevents measurement but visual examination suggests a narrow forehead, also characteristic of early populations in this hemisphere (Neumann 1952).

That this individual is probably male is indicated by moderate brow ridges, nuchal rugosity, and a fairly marked temporal line. The superior orbital margin also appears rounded.

Age at death of the individual can be estimated roughly at the third decade based on incomplete external closure of the sagittal and lambdoid sutures. There is no anomaly or trauma evident.

In summary, the individual represented by the cranium appears to be a male in his thirties, a member of an Archaic American Indian population, who died of causes not evident in the specimen examined.

REFERENCES CITED

Neumann, Georg K.

- 1952 Archeology and race in the American Indian. Yearbook of Physical Anthropology 8:213-255.

Newman, Marshall T.

- 1962 Evolutionary changes in body size and head form in American Indians. American Anthropologist 64:237-257.

APPENDIX E

SCOPE-OF-WORK AND PERTINENT CORRESPONDENCE



The University of Nebraska-Lincoln

Department of Anthropology
Division of Archeological Research
Lincoln, Nebraska 68588

March 21, 1979

Ms. Dorothy Flowers
Chief, Procurement Branch
Department of the Army
Omaha District, Corps of Engineers
6014 U.S. Post Office and Courthouse
Omaha, Nebraska 68102

Dear Ms. Flowers:

This letter proposal is in response to your March 2, 1979 request (RE: Plng 79-41-0001) for a cultural resource survey of a previously disturbed area (designated site 39DW35) on the Moreau River, Dewey County, South Dakota. This work is proposed in conjunction with pending Section 10 and 404 permit applications.

By way of this letter I would like to formally express our interest in carrying out this work. The total projected cost for the project will be \$3,319.00; a more detailed budget proposal is included below together with other pertinent information.

WORK TO BE PERFORMED

Investigations to be carried out in conjunction with the proposed project are fully outlined in the Scope-of-Work accompanying the above cited Request for Quotation. Minimally these investigations shall include: 1) full literature and records review, 2) an intensive on-the-ground examination and evaluation of the project area, 3) sub-surface test investigation of relevant areas within the defined project unit (we propose a minimum of 10-15 1 meter squares), 4) completion of a National Register of Historic Places evaluation form (if applicable), and 5) preparation of a final detailed report. All specifications in the original Scope-of-Work (including Storage of Artifacts, Rights of Entry, Distribution of Data) will be met in the proposed investigation.

PERSONNEL

The proposed investigation will be under the immediate direction of Mr. Carl R. Falk who will serve as principal investigator. Falk will be assisted by Mr. Robert E. Pepperl; vitae for Falk and Pepperl are enclosed separately. Field/laboratory labor will consist of graduate and advanced undergraduate students in Anthropology-all with at least one previous season of field experience.

The proposed investigation will be coordinated with the on-going UNL Lake Oahe East Bank survey program, also under Falk's direction.

FACILITIES

The facilities of the Division of Archeological Research and the Department of Anthropology of the University of Nebraska will be available for the duration of the proposed investigation. In addition to on-campus laboratories and comparative collections, the Division will operate a full field office and laboratory in Mobridge, South Dakota during the proposed Moreau River investigation; these facilities will also be available for the proposed project.

WORK SCHEDULE

The field phase of the proposed investigation will be completed prior to June 15, 1979 as specified in the Scope-of-Work. Appropriate coordination will be affected with the Contracting Officer's authorized representative on or prior to that date.

We would like to request that the reporting period be expanded to a total 150 days to permit submission of the draft report sometime in early September 1979. Submission of the draft report prior to that date will, in my opinion, adversely affect our ability to complete a fully professional document.

COST SCHEDULE

The following cost schedule is based on implementation of the project within the time frame outlined above; all investigations will be implemented and completed within the present fiscal year.

Ms. Dorothy Flowers

- 3 -

March 21, 1979

SALARIES AND WAGES

Principal Investigator (C.R. Falk, no direct cost to project)		
Archeologist (R. Pepperl; equivalent 1.0 month salary; off-campus)	\$1,042.00	
Field/Laboratory labor (unnamed, equivalent 120 hours, \$4.00/hour; off-campus)	480.00	
Clerk-typist (unnamed; equivalent 10 hours, \$4.00/hour; off-campus)	40.00	
Fringe (Archeologist) @ 14%	146.00	
Fringe (Field/Laboratory labor and Clerk-typist) @ 6.13%	<u>32.00</u>	
		\$1,740.00

TRAVEL AND TRANSPORTATION

Vehicle Rental (equivalent 1 week)	25.00	
Mileage (500 miles @ 16¢/mile)	80.00	
Per Diem Expenses (Field personnel only; \$7.50/day, equivalent 15 man-days)	<u>113.00</u>	
		218.00

OPERATING EXPENSES

Consultation (Geology/Geomorphology)	250.00	
Preparation of Draft, Final Report; National Register Forms (includes necessary drafting, photography, printing and reproduction)	<u>500.00</u>	
		750.00

OPERATING SUPPLIES AND MATERIALS

Expendable Supplies (field only)	<u>50.00</u>	
		<u>50.00</u>

Total Direct Cost	2,758.00
-------------------	----------

INDIRECT COST

Off-campus (35.9% of off-campus S&W)	<u>561.00</u>	
		<u>561.00</u>
TOTAL ESTIMATED COST		<u>\$3,319.00</u>

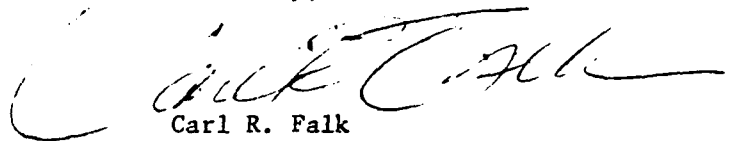
Ms. Dorothy Flowers

- 4 -

March 21, 1979

We appreciate the opportunity to continue participation in your cultural resource management program; if I can provide additional information please do not hesitate to contact me directly (telephone [402] 472-2412/2481).

Sincerely,




Carl R. Falk
Director


CRF:ls

xc: Dr. F.L. Schmehl, UNL Research Administrator


ENDORSEMENTS:



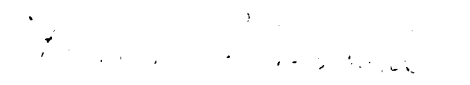
Mr. Carl R. Falk, Director
Division of Archeological Research
Department of Anthropology
Telephone: 402 472-2412/2481



Dr. Dale R. Henning, Chairman
Department of Anthropology
University of Nebraska-Lincoln
Telephone: 402 472-2423/2411



Dr. Max D. Larsen, Dean
College of Arts and Sciences
University of Nebraska-Lincoln
Telephone: 402 472-2891



Dr. Francis L. Schmehl
Research Administrator
University of Nebraska-Lincoln
Telephone: 402 472-3171

CHECKED BOX APPLIES		<input checked="" type="checkbox"/> ORDER FOR SUPPLIES OR SERVICES DF/Et		<input type="checkbox"/> REQUEST FOR QUOTATIONS NO. RETURN COPY(IES) OF THIS QUOTE BY (THIS IS NOT AN ORDER. See DD Form 1155r)		PAGE 1 OF 1 1	
1. CONTRACT/PURCH ORDER NO. DACW45-79-M-2246		2. DELIVERY ORDER NO.		3. DATE OF ORDER 79 APR 18		4. REQUISITION/PURCH REQUEST NO. Plng-79-41	
6. ISSUED BY: Omaha District Corps of Engineers 6014 U.S.P.O. & Courthouse Omaha, NE 68102 MS. Flowers-402/221-4101		7. ADMINISTERED BY: (If other than 6)		8. DELIVERY FOB <input checked="" type="checkbox"/> DEST <input type="checkbox"/> OTHER (See Schedule if other)		5. CERTIFIED FOR NATIONAL DEFENSE UNDER DMS REG 1 DO	
9. CONTRACTOR/QUOTER NAME AND ADDRESS Carl Falk Division of Archeological Research Department of Anthropology University of Nebraska Lincoln, NE 68588		10. DELIVER TO FOB POINT BY: 150 days after receipt of order		11. CHECK IF <input checked="" type="checkbox"/> SMALL BUSINESS <input type="checkbox"/> MINORITY BUSINESS		12. DISCOUNT TERMS Net	
14. SHIP TO: U.S. ARMY ENGINEER DISTRICT, OMAHA CORPS OF ENGINEERS 6014 U.S.P.O. & COURTHOUSE - PLANNING DIV. OMAHA, NE 68102		15. PAYMENT WILL BE MADE BY: Disbursing Officer Corps of Engineers 6014 U.S.P.O. & Courthouse Omaha, NE 68102		13. MAIL INVOICE TO: See Block 15		MARK ALL PACKAGES AND PAPERS WITH CONTRACTOR ORDER NUMBER	
16. DELIVERY This delivery order is subject to instructions contained on this side of form only and is issued on another Government agency or in accordance with and subject to terms and conditions of above numbered contract.							
17. ACCOUNTING AND APPROPRIATION DATA: LOCAL USE 96X3123 O&M Gen., CofE, Civil (CG51005700-0)							
18. TYPE OF ORDER PURCHASE <input checked="" type="checkbox"/> DELIVERY <input type="checkbox"/>							
19. REFERENCE YOUR General Provisions of Purchase Order on DD Form 1155r (EXCEPT CLAUSE NO 13 APPLIES ONLY IF THIS BOX <input type="checkbox"/> IS CHECKED, AND NO 15 IF THIS BOX <input type="checkbox"/> IS CHECKED). special provisions							
10 USC 2304(a)(3) or as specified in the schedule if within the U. S., its possessions or Puerto Rico; if otherwise, under 2304(a)(6). Please sign and return Copy 9 to our office, Attn: Proc. & Supply Division							
20. QUANTITY ORDERED/ACCEPTED 21. UNIT 22. UNIT PRICE 23. AMOUNT							
1. SERVICES: Furnish archeological reconnaissance investigation including literature research for Section 10 and 404 permit application pending for domestic water intake structure on Missouri River mile 1175.0 Lake Oahe, South Dakota.		1		lot		L.S.	
3,319.00		DUPLICATE ORIGINAL					
24. UNITED STATES OF AMERICA BY: D. L. FLOWERS CONTRACTING/ORDERING OFFICER		25. TOTAL \$3,319.00		26. QUANTITY IN COLUMN 20 HAS BEEN: <input type="checkbox"/> INSPECTED <input type="checkbox"/> RECEIVED <input type="checkbox"/> ACCEPTED AND CONFORMS TO THE CONTRACT EXCEPT AS NOTED			
27. SHIP. NO. <input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL		28. D. O. VOUCHER NO.		29. DIFFERENCES			
30. INITIALS		31. PAID BY		32. AMOUNT VERIFIED CORRECT FOR			
33. PAYMENT <input type="checkbox"/> COMPLETE <input type="checkbox"/> INITIAL		34. CHECK NUMBER		35. BILL OF LADING NO			
36. I certify this amount is correct and proper for payment.		37. RECEIVED AT		38. RECEIVED BY		39. DATE RECEIVED	
DATE SIGNATURE OF AUTHORIZED GOVERNMENT REPRESENTATIVE		DATE SIGNATURE AND TITLE OF CERTIFYING OFFICER		40. S/R ACCOUNT NUMBER		41. S/R VOUCHER NO	



DEPARTMENT OF THE ARMY
OMAHA DISTRICT CORPS OF ENGINEERS
6014 U.S. POST OFFICE AND COURTHOUSE
OMAHA NEBRASKA 68102

MROSD-P

18 April 1979

NOTICE TO PROCEED

Carl Falk
Division of Archeological Research
Department of Anthropology
University of Nebraska
Lincoln, NE 68588

Dear Mr. Falk:

You are directed to proceed with the work covered by Contract No.
DACW45-79-M-2246.

Please complete the acknowledgement at the bottom of this page and return
two (2) copies.

Sincerely yours,

D. L. FLOWERS
Chief, Procurement Branch
Procurement & Supply Division
Contracting Officer

This Notice to Proceed was received April 20, 1979

Date

By

Title Director, Division of
Archeological Research

SCOPE OF WORK

CULTURAL RESOURCE SURVEY OF DISTURBED AREA ON THE MOREAU RIVER IN CONNECTION WITH PENDING PERMITS SD 2XB OXT 3 000823 & 824

I. INTRODUCTION

Prior to the in-house cultural resources survey by a staff archeologist, the applicant for these two permits proceeded with construction.

The disturbed area is located in [redacted], [redacted], [redacted] of Section [redacted], Township [redacted] N, Range [redacted] E. in Dewey County, South Dakota. A burial site with grave goods was located within this area.

II. WORK TO BE ACCOMPLISHED

The work to be accomplished shall consist of an intensive Cultural Resources Survey and National Register Testing of the project area. The survey shall consist of: (1) an exhaustive literature and records search, (2) an on-the-ground examination of the project area, (3) National Register testing and the completion, by the contractor, of National Register of Historic Places forms if applicable, and (4) the preparation of a detailed project report.

Information and data for the literature and records search shall be obtained from, but not limited to, published and unpublished reports and documents such as books, journals, theses, dissertations, manuscripts, and site records. Representative sources to be checked are the University of South Dakota at Vermillion, the Archeological Research Center at Fort Meade, the Midwest Archeological Center in Lincoln, the South Dakota Department of Education and Cultural Affairs, Vermillion, South Dakota, local historical societies, and consultation with other professionals and local informants known to have knowledge of the cultural heritage of the proposed project area.

The testing of site 39DW35 shall consist of a determination of the temporal and partial extent of subsurface deposits, site type, the extent and amount of impact to the site that has been caused by recent human activities, and a determination of eligibility of the site to the National Register of Historic Places.

The actual testing of the site shall be accomplished in the following manner: (a) a permanent datum point shall be established, (b) site testing shall consist of test units

excavated according to a standard meter grid system. The location of the grid system shall be described in terms of permanent reference points; (c) a plane table map of the site shall be produced and shall include the location of the datum point, grid system, and excavated test units; (d) the number, size, and location of the test units shall be established at the discretion of the Principal Investigator; (3) excavation of the test units shall proceed according to the natural or cultural stratigraphy of the site. If no such stratigraphy is evident, excavation shall be accomplished in terms of 10 cm levels. Excavation shall proceed to a depth which the Principal Investigator determines to be below the lowest occurring cultural material. At least one wall of each test unit displaying stratigraphic breaks and/or from which cultural materials have been retrieved shall be profiled. The elevation of stratigraphic breaks and cultural features shall be indicated on these profiles; (f) all excavated fill shall be dry screened by stratigraphic or arbitrary levels for recovery of artifacts and faunal material. In addition, at least one matrix sample from each stratigraphic or arbitrary level shall be water screened through 1/16 inch screen for recovery of small materials. The size and selection of these samples shall be at the discretion of the Principal Investigator. However, the size of the samples shall remain constant so that comparisons between levels can be made; (g) any cultural features excavated (e.g. postholes, hearths, burials) shall be recorded in terms of the test unit in which they were encountered, the stratigraphic or arbitrary level(s) in which they occur, and elevation. Matrix from these features (e.g. fill from a pit) shall be water screened separately from other matrix samples; (h) photographs are to be taken which will record, but not be limited to, general excavation procedures, representative test unit profiles displaying site stratigraphy, and all cultural features excavated. These photographs are to be adequately cataloged and incorporated into the permanent records of the site excavation.

All reasonable steps should be taken to identify the datum, grid, test units, and feature locations in terms of permanent reference points so that they can be readily relocated by future researchers and tied into any subsequent testing or excavation of the site.

The detailed project report shall include but not necessarily be limited to: (1) abstract, (2) introduction, (3) regional location, (4) methodology, (5) evaluation, discussion of previous work and inventory of cultural resources, (6) National Register nomination forms if necessary (7) a concise definitive summary with references, and (8) appendices as necessary. The abstract shall be a synopsis of the report. The introduction shall include, but not necessarily be limited to,

a statement of purpose, delineation of the study boundary and a general statement of the nature of the previous work. All National Register forms (if necessary) shall be typed.

The report shall contain a summary and evaluation of previous archeological and historical studies of the areas, including the dates, extent and adequacy of past work as it reflects on the interpretation of what might be found in the project areas. The report shall contain an inventory and description of all cultural resources located within the project area and recommendations and discussions for the need for, and scope of, further cultural resources investigations.

All references cited and/or utilized shall be listed in standard American Anthropological Association format. Appendices shall include, but shall not be limited to: (1) survey forms, (2) maps of the study area and site locations, (3) site photographs, and (4) a list and description of collected artifacts, if applicable.

III. COLLECTION AND STORAGE OF ARTIFACTS

All collected materials shall be processed, catalogued and stored in containers plainly marked "Property of the U.S. Government, Corps of Engineers, Omaha District," at a location agreed to by the Contracting Officer.

IV. RIGHTS OF ENTRY

The study area is located on Federal lands administered by the U.S. Army Corps of Engineers, Omaha District. The field examination shall be conducted in close coordination with the contract administrator and the South Dakota Area Engineer. The contractor shall assume responsibility for any liability incurred during the course of the survey. A map of this area is included as part of the Scope of Work.

V. WORK SCHEDULE

The contractor shall submit a proposal by 6 April 1979. The Contracting Officer will award the contract by 20 April 1979, either by written or verbal communication.

The actual field work is to be completed by 15 August 1979, Contractor shall call the Contracting Officer's cultural representative at (402) 221-3170 with an informal opinion of probable resources present in the project areas upon completion of the field investigation.

The contractor shall submit six copies of the complete survey report in draft form within 150 calendar days after

receipt of notice to proceed. The Government shall have a maximum of 90 calendar days to review and revise comments into the final report and submit the final original report, with all negatives, photographs, maps, charts, tables, and standard drawings, to the Government.

VI. METHOD OF PAYMENT

Payment for services rendered will be made upon receipt by the Government of the complete report, in draft form, for 75 percent of the contract price. The remaining 25 percent of the contract price will be paid upon final acceptance of the contract documents by the Government.

VII. DISTRIBUTION OF DATA

Neither the contractor nor his representatives will release or publish any sketch, photographs, report, or other material of any nature obtained or prepared under this contract without specific written approval of the Contracting Officer.

Page 75



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
OMAHA DISTRICT CORPS OF ENGINEERS
6014 U.S. POST OFFICE AND COURTHOUSE
OMAHA, NEBRASKA 68102

MROPD-E

13 June 1980

Carl R. Falk
Division of Archeological Research
Department of Anthropology
The University of Nebraska at Lincoln
Lincoln, NE 68588

Dear Mr. Falk:

We have received the review and comments concerning the report entitled "An Archeological Investigation and Assessment of the Three Horse Site (39DW35), Moreau River Area, West Shore Lake Oahe, Dewey County, South Dakota." In general, the comments were favorable for the prehistoric component. Both the South Dakota State Historic Preservation Officer (SHPO) and Interagency Archeological Services (IAS) agree that the aboriginal remains were adequately addressed and that they do not meet the eligibility criteria for the National Register of Historic Places. Interagency does question the adequacy of the assessment of the historic component. Their comments, as well as the comments from the South Dakota SHPO, have been included. Also included is a copy of the report with editorial changes.

Please incorporate these changes into the final report. You may also wish to address the comments from IAS. We look forward to receipt of the final report. We hope the delay in receiving these reviews did not inconvenience you.

Sincerely,

3 Incl
as stated


RICHARD L. BUSE
Acting Chief, Planning Division



United States Department of the Interior
HERITAGE CONSERVATION AND RECREATION SERVICE
INTERAGENCY ARCHEOLOGICAL SERVICES-DENVER
P.O. BOX 25387, DENVER FEDERAL CENTER
DENVER, COLORADO 80225

IN REPLY REFER TO:

1201-05 (W530)

APR 21 1980

Mr. John E. Velehradsky
Chief, Planning Division
Department of the Army
Omaha District, Corps of Engineers
6014 U.S. Post Office and Courthouse
Omaha, Nebraska 68102

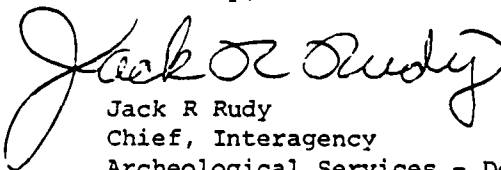
Dear Mr. Velehradsky:

In response to your request of March 12, 1980, we have completed our review of the draft report entitled, "An Archeological Investigation and Assessment of the Three Horse Site (39DW35), Moreau River Area, West Shore Lake Oahe, Dewey County, South Dakota." Enclosed please find copies of the individual reviews.

Reviewers agree that the direct impact area of the site, containing prehistoric remains, has been adequately assessed and that no further work is warranted. However, they question assessment of the historic, upper terrace component of the site, as well as the recommendations based on that assessment.

Thank you for allowing us to review this report; we trust that our comments prove useful.

Sincerely,


Jack R Rudy
Chief, Interagency
Archeological Services - Denver

Enclosures

DATE: April 16, 1980

memorandum

SUBJECT: Review of "An Archeological Investigation and Assesement of the Three Horse Site (39DW35) Morreau River Area, West Shore Lake Oahe, Dewey County, South Dakota."
TO: Review Coordinator *JZH*

Subject report is a draft prepared by the University of Nebraska, Lincoln under Purchase Order from Omaha District, Corps of Engineers. It concerns the reconnaissance and testing of an archeological site identified by Corps of Engineers personnel as a result of an after-the-fact permit application for construction on public lands.

At first reading, this seems to be a concise, but thorough report that answers immediate questions. The site consists of two general areas (1) a high terrace containing historic aboriginal (?) house sites, and other archeological evidence, and (2) a lower area yielding lithic material and human remains. The latter area was directly impacted by unauthorized construction. Subsurface testing of the latter area indicated on archeological and geomorphological grounds that the observed materials were out of original context and of little use for archeological study. This part of the report is completely supportable on the basis of the presented evidence.

The report findings and recommendations regarding the upper, terrace area are not wholly satisfactory. The statement on Page 17 that, "all field efforts strongly suggest that significant intact subsurface deposits are lacking" is not fully supported by the results of test 2. If these materials are not considered significant in context of adjacent historic foundations, the authors should state why. Clarification is also required of the authors' recommendation on Page 19 that site 39DW35 does not meet National Register criteria. I interpret this recommendation to mean that the site has not yielded, neither is it likely to yield, information important to prehistory or history. This finding requires support. Summary statement number three on Page 20 also requires clarification. The evidence presented in this report does not clearly suggest possible use of the upper terrace by Plains Village period peoples, as opposed to any other period peoples. The authors are on firm ground in their assessment and recommendations regarding the immediate impact area. However, their assessment of the upper terrace raises more questions than it answers.



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OPTIONAL FORM NO. 10
(REV 7-78)
GSA FPMR (41 CFR) 101-11.6
5010-112

DATE: April 10, 1980

memorandum

SUBJECT: Review: "An Archeological Investigation and Assessment of the Three Horse Site (39DW35), Moreau River Area, West Shore Lake Oahe, Dewey County, South Dakota" by Falk and Pepperl

TO: Supervisory Archeologist (Hoffman) *JFH*

The Three Horse Site was damaged by construction activities prior to a cultural resource inventory. The work described in this report was to document the site and make National Register evaluations.

The Three Horse Site has two components: prehistoric and historic. The prehistoric component has chipped stone artifacts and human bone (grave?). The skeletal material is assigned to an archaic or late-paleo affiliation. The exact relationship with the lithic is uncertain because of the severe disturbance but some relationship is assumed. The historic component is assigned to the late Reservation period, approximately 1890. Evidence includes three "house" depressions and scattered historic artifacts.

The report contains site and artifact descriptions, field work methodology, prehistoric file search, maps, and consultant reports. However, the two components are provided unequal treatment. Some problems are identified below:

1. Are the three "historic house" depressions part of 39DW35? It would seem from the abstract that they are, yet they do not seem to have been adequately evaluated as part of the site. The test units were all placed within the prehistoric component and only incidentally sampled the historic component (see Fig. 3). Without testing, how do we know all three historic depressions contain collapsed "houses?" Might the structures have other functions?

I agree that the prehistoric component is not eligible for the National Register of Historic Places due to the severe disturbance and there being little left of the site. However, I do not agree with the determination that the historic component is also not eligible. No historic file search is identified, although the Scope-of-Work states . . .

1) an exhaustive literature and records search . . ." (will be made). And the house depressions were not tested to determine the nature of the deposits. How much do we know about the late Reservation period? I suggest the eligibility determination for the historic component cannot be made with existing data.



Buy U.S. Savings Bonds Regularly on the Payroll Savings Plan

OPTIONAL FORM NO. 10
(REV. 7-76)
GSA FPMR, 41 CFR, 101-11.6
5010-112

2. Why was only the human cranium analyzed and not all the human bone? Were the other bones too fragmentary or not available? The report should tell us.

3. This is a minor point but the statement about cultural chronology of the study area could be made more specific. For example, the Middle Missouri Tradition could be restated as Extended Middle Missouri Variant, and the Coalescent Tradition could be restated as Extended and Post-Contact Coalescent Variants (see report p. 9). This brackets prehistoric utilization of the area more closely.

In sum, this is generally a good report that is more than adequate for the prehistoric component. No additional field work is required at this time. However, should the house depressions be threatened, an evaluation of their National Register significance should be undertaken.



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
OMAHA DISTRICT, CORPS OF ENGINEERS
6014 U.S. POST OFFICE AND COURTHOUSE
OMAHA, NEBRASKA 68102

MROPD-E

12 March 1980

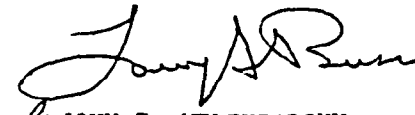
Mr. Jack Rudy
Interagency Archeological Services
Office of Archeology & Historic Preservation
Heritage Conservation & Recreation Service
P.O. Box 25387
Denver Federal Center
Denver, CO 80225

Dear Mr. Rudy:

A copy of the draft report, "An Archeological Investigation and Assessment of the Three Horse Site (39DW35), Moreau River Area, West Shore Lake Oahe, Dewey County South Dakota," is included with this letter. Please review this report and send us your comments concerning the adequacy of the work. Your comments should reach our office no later than 18 April 1980.

Thank you for your attention to this matter. We look forward to your reply.

Sincerely,



JOHN E. VELEHRADSKY
Chief, Planning Division

Inclosure
As stated

**HISTORICAL
PRESERVATION
CENTER**

University of South Dakota
Vermillion, S.D. 57069
Phone (605) 677 5314



Department of
Education and Cultural Affairs

June 3, 1980

Mr. John E. Velehradsky
Chief, Planning Division
Department of the Army
Omaha District, Corps of Engineers
6014 U.S. Post Office and Courthouse
Omaha, NE 68102

Dear Mr. Velehradsky:

We have received and reviewed the report entitled: "An Archeological Investigation and Assessment of the Three Horse Site(39DW35), Moreau River Area, West Shore Lake Oahe, Dewey County, South Dakota."

The archaeological site 39DW35 does not meet the criteria for listing in the National Register of Historic Places(36 CRF 60.6). Therefore, the undertaking will have no effect on significant cultural resources.

Sincerely,

STEVEN D. Rynold
for John J. Little
State Historic Preservation Officer

RESPONSE TO THE REVIEW COMMENTS

Corps of Engineers, Omaha District

As requested, all editorial corrections and other suggestions noted on the original copy of the draft report have been taken into consideration in the final report.

South Dakota Department of Education and Cultural Affairs

No comment.

Heritage Conservation and Recreation Service

The following general comments are offered in response to the HCRS overall evaluation of the draft report. More specific comments are adequately addressed within the text of the final report.

Field efforts conducted on the upper terrace (non-impact area) were initially designed to investigate the possibility that the site reported by the Corps of Engineers (borrow area find) might extend to the upper elevation or that this upper area might represent a source of the borrow area materials (esp. human remains). As a result of this undertaking, separate components (surface scatter of flaking debris and depressions and historic debris scatter) were identified. In addition to intensive surface documentation of this upper area, two methods of subsurface investigation were employed; a) controlled tests (1 x 1 m. squares) were excavated to determine cultural and natural stratigraphy and to establish the integrity of subsurface remains. The general placement of these units was based largely on consideration of surficial criteria (topography and presence or absence of cultural material) and; b) extensive probe tests (1-inch core) were systematically placed along and within surface depressions as well as across the general site area. These probe tests, in conjunction with the controlled tests, were utilized to determine general stratigraphic conditions and to assess the productivity of further testing efforts. Although all three depressions were probed, no evidence of subsurface cultural materials (e.g., decayed wood or ash) or identifiable soil changes was identified (see page 12). On the basis of these results, and in view of the low density and diversity of surface remains, it was not considered productive to extend the subsurface investigation. That is, it is not likely, given extensive excavation (which would result in destruction of the site), that further substantive information relevant to site interpretation (e.g., function of depressions) would be obtained.

Given the conditions outlined above (and as presented in the report) at the present time, none of the components represented are considered to be "likely to yield information important in prehistory or history" (36CFR60.6). This conclusion does not in any way deny 'research interest' in the area. Certainly most, if not all, cultural remains (prehistoric or historic) are of some potential importance to some research interest. However, attributing research significance (National Register quality) to a site in the absence of evidence that substantial or diverse data categories could be expected, given future investigation, would seem incongruous with the spirit of the legislation, particularly given the absence of a full resource inventory for the general area.